peculiar form, named by Dr. Gould Agadina cucullata, which seems to belong to the family Limacinidæ, was taken in the towing-net during the passage of H.M.S. 'Actæon' across the North Atlantic, besides numerous interesting oceanic Crustaceans, including the genera Lucifer, Hyperia, Phyllosoma, Amphion, Oxycephalus, Alima, and Pontia.

I am, Gentlemen, Yours very truly, ARTHUR ADAMS.

# Macgillivrayia echinata, A. Adams.

M. testa cornea, diaphana, subglobosa, lævi, nitida; anfractibus 2½ serie spinarum acutarum vitrearum armatis; apertura semiovata; labio antice producto, in spinam acutam desinente.

Hab. in Oceano Atlantico Boreali.

Shell horny, pellucid, subglobose, smooth, shining; whorls  $2\frac{1}{2}$ , with a series of long, sharp, vitreous spines round the periphery, directed upwards and outwards. Aperture semioval; columellar lip produced anteriorly into a long pointed spine. Operculum annular, with the nucleus subcentral.

Taken in the towing-net in the vicinity of the Cape de Verd

Islands.

This species differs from all the others known by the whorls being armed with a series of recurved calcareous spines.

# XXIX.—Descriptions of new Ceylon Coleoptera. By John Nietner, Colombo, Ceylon.

[Continued from p. 249.]

# Anchista, n. g., N.

Corpus depressum, ovatum. Mentum dente magno obtuso, lobis parum breviore, his extus rotundatis, apice acuminatis. Palpi robusti, maxillares art. ultimo magno ovato, apice obtuso, labiales art. ultimo valde securiformi. Ligula cornea apice obtuse acuminata, labri marginem anteriorem attingens. (Paraglossæ a me non dissectæ.) Labrum transversim quadratum. Mandibulæ simplices apice arcuatæ et acuminatæ. Antennæ robustæ art. 1° mediocri, 2° brevi, 3° quarto paulo longiore, 4–10 subæqualibus, 11° penultimo parum longiore. Thorax longitudine latior, angulis anticis rotundatis, medio obsolete angulatus, basi angustatus, angulis rectis. Elytra apice quadrate truncata. Pedes robusti, tarsi art. 4° profunde bilobato, unguibus fortiter pectinatis.

#### 12. Anchista modesta, N.

A. brunneo-testacea, elytris (maculis 2 obsoletis subhumeralibus exceptis) obscurioribus, abdomine piceo. Long. corp. 4 lin.

Caput fronte medio leviter uniimpressa. Thorax linea media longitudinali divisus. Elytra apicem versus parum dilatata, striatopunctata, ad striam 2<sup>m</sup> punctis 2 majoribus subapicalibus, cum thorace marginata.

Prope Colombo nocte ad lumen cepi.

The characteristics of this new genus are those of Calleida (between which and Cymindis I place it) excepting the ligula, which in this case is obtusely acuminated; the last joint of the maxillary palpi, which is obtuse at the apex; and the thorax, which is not, as in Calleida, longer than broad, but the reverse. From Cymindis it would differ principally in the deeply bilobed fourth tarsal joint, and in some other minor points; but it is difficult to say what the true characteristics of this genus (which appears for this reason to require a careful revision) are, if even-Lacordaire uses the particle "on" not less than five times in the diagnosis he gives of it in his 'Genres des Coléopt.' However, I feel justified in separating Anchista from Cymindis as well as from Calleida. The name "Anchista" has reference to the affinity of the insect to the two genera just mentioned, whilst the specific name "modesta" refers to its inconspicuous colours. Amongst its peculiarities, weight ought to be laid upon the plumpness of the palpi, and in fact on all the other parts of the mouth, and even the whole head, which was very striking to me.

Like many of my best Carabidæ, I found this insect at night on the table, whither it had been attracted by the light. I may mention that the single specimen which came thus into my possession has an oblong shallow impression on either elytron,—perhaps accidental, perhaps a peculiarity. The anterior tarsi are dilated and furnished with hairy brushes below, longest at the

apex of the lobes of the fourth joint.

# Elliotia, n. g., N.

Corpus subconvexum, ovatum. Caput mediocre, oculis maximis. Mentum leviter transversim emarginatum, edentatum, lobis acuminatis. Ligula submembranacea apice truncata, paraglossis connatis marginem anteriorem parum superantibus, obtusis. Palpi elongati, art. ultimo elliptico, acuminato. Labrum magnum transversum, integrum, mandibulas fere obtegens. Mandibulæ validæ, edentatæ. Antennæ robustæ filiformes, humeros superantes, art. 1º mediocri, 2º brevi, 3º quinti prope longitudine, 4º præcedente breviore, 2-4 obconicis, 5-10 æqualibus, cylindricis, 11º præcedente tertia parte longiore, 4-11 pilosis. Thorax parvus, capite minor, transversus,

longitudine duplo latior; antice leviter emarginatus, lateribus elevatomarginatus, ab apice ad medium lateribus rotundatus, medio fortiter angulatus, a medio ad basin valde abrupteque angustatus, basi truucatus, subtus cylindricus. Scutellum leviter excavatum. Elytra ovata marginata, apice sat fortiter truncata. Pedes omnes subæquales, simplices, tenues, tarsis cylindricis art. 3–4 magis minusve trigonis, unguibus simplicibus. Prosternum carinatum.

In honorem Dom. Hon. Walteri Ellioti (Maderaspatani), natural-

istæ diligentissimi, měřitissimi, nomen imposui.

# 13. Elliotia pallipes, N.

E. supra nigra, nitida, thorace scutelloque rufo-testaceis, labro elytrorumque limbo atque sutura brunneo-testaceis; subtus picea, pectore rufo-testaceo, pedibus albidis, geniculis oreque (palpis obscurioribus exceptis) testaceis. Long. corp.  $2\frac{1}{4}$  lin.

Caput ad antennarum insertionem et inter oculos utrinque profunde impressum. Thorax basi rugosus, ante medium utrinque uniimpressus, linea media longitudinali divisus. Elytra punctatostriata, infra humeros leviter impressa.

In ripis lacus Colombensis sub veget. putrescent. mens. Jul. non infrequenter legi. Agilis est et avolare semper expeditus.

A pretty and very interesting little insect, about whose systematic position I am not quite satisfied; however, I provisionally place it towards the end of the true Lebiidæ. I find it most to agree with the descriptions of Pentagonica, S. G., and Rhombodera, R., with neither of which, however, it is identical. head is distinguished by the large and prominent eyes, and four deep impressions, two larger ones at the root of the antennæ, two smaller ones between the eyes, also by a very distinct neck, which connects it with the thorax; the labrum is large, transverse and entire, with the angles rounded off and the base narrowed; the mentum is but slightly transversely emarginate, edentate; the ligula is truncated at the tip, the paraglossæ adhere to it, reach a little beyond it, and are obtuse at the apex; the palpi are rather long, with the last joint elliptic, acuminate; the antennæ are strong, filiform, and reach beyond the shoulders, joints 5-10 are of equal length and cylindric, 4-11 are pilose. The most remarkable part of the insect is, however, the thorax, which is of a subrhomboidal shape, transverse, smaller than the head, as broad again as long; it has two strong, lateral angles at the middle, each furnished with a strong bristle; the anterior part has the sides rounded, the posterior abruptly obliquely contracted; at the base it is cylindric. As a specific distinction of the thorax, I mention, moreover, that in the present species it is impressed with two deep punctures before the middle, and that it is rugose at the base. The abdomen is slightly peduncled.

The scutellum is slightly excavated. The elytra are oval, rather convex, and impressed with rows of punctures. The legs are simple and weak, apparently equal in both sexes. The anterior tarsi are a little stouter than the rest, but not dilated nor furnished with any additional clothing below; the anterior tibiæ are deeply notched. As to the colour: the head and wingcovers are black, the latter with the suture and margin of a light brown, and highly polished; the thorax is reddish, and the legs are whitish. The insect is very agile, and ever ready to take to its wings. It is of quite a peculiar appearance, imparted to it by its large eyes, small, euriously-shaped thorax, and rather plump elytra and abdomen. I may further mention that I have observed the fourth joint of the maxillary palpi collapse when the specimens become quite dry, so as to give them a different, spoon-like appearance, apt to mislead any one who has not examined fresh specimens.

# 14. Harpalus advolans, N.

H. æneus, clypeo, labro, antennis mandibulisque brunneis, his apice nigris, subtus testaceus, lateribus obscurior, pedibus flavis, tarsis, geniculis spinulisque brunneis, ore testaceo. Long.corp. $4\frac{3}{4}$ - $5\frac{1}{4}$  lin.

Caput leve. Mandibulæ unidentatæ. Palpi art. ultimo elongato, apice truncato. Menti dens simplex, obtusus. Ligula apice quadrate truncata, angulis acutis leviter productis, paraglossis inflatis marginem anticum parum superantibus. Thorax longitudine sesqui latior, dorso anticeque lævis, basi rugoso-punctatus, 2-impressus. Elytra striata, cum thorace anguste marginata. Variat colore testaceo-ænea.

Nocte ad lumen, sed ad huc non usquam alibi, non infrequenter cepi.

I have taken this species frequently at night on my table, but never found it as yet anywhere else. It is not very distinguished, for which reason I have mentioned the parts of the mouth in the description, these being, moreover, not very constant in this genus. The insect is of the usual oval Harpalus-form, of a dark metallic green on the back, and more or less yellowish or light brown below, the colour of the back changing occasionally to a brownish green.

# 15. Oodes piceus, N.

O. ovatus, subconvexus, piceus, tarsis, palpis antennarumque articulis 3 primis castaneis, palpis apice flavis. Long. corp. 4 lin.

Caput parvum, inter antennas linea latitudinali abbreviata impressum. Labrum integrum, punctis 3 impressum, puncto intermedio bi, lateralibus uni-setigeri. Mandibulæ validæ prominentes. Palpi art. ultimo elongato-ovato, apice leviter truncato. Menti dens apice

truncatus leviterque sinuatus. Antennæ art. 3° quarto æquali nisi paulo breviore. Thorax amplus basi elytris applicatus, apicem versus angustatus, angulis posterioribus subdepressis translucentibus, ante scutellum leviter sinuosus, ante sinum obsolete latitudinaliter impressus. Elytra striata, cum thorace angustissime marginata. Pedes validi, ant. tibiis apice intus uni-, intermed. et post. bi-calcaratis.

Specimen singulum f. in ripis lacus Colombensis sub. vegetab.

putrescent. legi.

As one species with a bifid mentum-tooth (O. pulcher) has been already received into this genus, I have waived the hesitation I should otherwise have felt in referring to it the present one, the tooth of which is of a similar description. I have not seen the O. pulcher; but, as it is said to be an inhabitant of this part of the world, it may possibly be identical with my species. If not, they might, as the genus is otherwise pretty constant in its characteristics, be separated under a new name as types peculiar to India. Besides the abnormal mentum-tooth, the insect has not much to distinguish it from others of the genus. The labrum is, however, peculiar, being entire, or even very slightly produced in the middle, with the angles rounded off; it is impressed near the anterior margin with three deep punctures, the central one of which is furnished with two, the lateral ones with one strong bristle each. The anterior tibiæ are but slightly notched. prosternum is largely developed, reaching beyond the anterior coxæ, obtusely acuminated, and received in a deep excavation of the mesothorax. But I doubt whether the development is sufficiently large to entitle the insect to a place in Lonchosternus, Laf., which, however, I have not seen.

# 16. Trichopteryx cursitans, N.

T. ovata, subconvexa, pubescens, supra obscure ænea, elytris æneobrunneis, subtus picea, pedibus oreque testaceis, antennis art. 3-11 nigrescentibus. Long. corp.  $\frac{2}{5}$  lin.

Antennarum clava art. 2 primis ovatis, ultimo conico, acuminato. Thorax amplissimus, elytris tertia parte minor, convexus, angulis acutis, basi humeros amplectens, apice angustatus. Elytra subdepressa, subquadrata, apicem versus parum angustata, truncata, abdominis 3-4 segmenta ultima non obtegentia. Tibiæ medio incrassatæ. Coxæ posticæ maxime dilatatæ. Mesosternum carinatum.

Sub veget. putrescent. exsiccescentibus in prov. occid. copiosa.

A rather large species, commonly met with in this part of the island, under rotting vegetable substances somewhat dried up. It is very agile, and ready to take to its wings, which are of the beautiful typical construction, about twice the length of the body, and, in dead specimens, frequently produced behind. These insects vary a little as to shape, some being more narrowed

behind than others, and also as to the exact number of the abdominal segments left uncovered by the elytra. The head is large, but exhibits nothing abnormal or extraordinary; the thorax is very large, emarginated in front and behind, with the angles acute, the basal ones enveloping the shoulders; the wingcovers are subquadratic, with the angles rounded off and a little narrowed behind; the legs have the tibiæ incrassated in the middle, and the posterior coxæ very much dilated and distant from each other; in all other respects they are typical. The shape of the body is that of an egg, broadest at the shoulders, gently narrowed towards the apex of the abdomen, and rounded off towards the head.

# 17. Trichopteryx immatura, N.

T. præcedenti similis, differt tamen colore: supra æneo-testacea, subtus testacea, antennarum art. 3-11 nigrescentibus; differt etiam corpore crassiore, magis quadrato, capite paulo majore, thorace minus convexo, parum ampliore, elytris abdomen totum vel fere totum obtegentibus. Pedes, antennæ &c. omnino præcedentis. Long. corp. ½ lin.

In præcedentis societate specimina nonnulla legi.

Somewhat resembling in aspect an immature individual of the former, but sufficiently distinct to be formed into a new species. The insect is altogether of a different appearance, imparted to it by the greater general plumpness of the body, the larger head, the less convex, but at the same time possibly still ampler thorax, the altogether more quadratic shape, &c. The remark regarding the exact number of abdominal segments left uncovered by the elytra applies to this and all other species as well. The present one has generally the last two segments uncovered.

# 18. Trichopteryx invisibilis, N.

T. ovata, subdepressa, subparallela, pilosa, supra obscure ænea, subtus picea, pedibus, abdomine, antennis oreque testaceis. Long. corp. vix.  $\frac{1}{5}$  lin.

Thorax amplus, elytris sesqui minor, convexus, angulis posticis humeros vix superantibus. Elytra oblonge quadrata angulis rotundatis, subdepressa, truncata, abdomen totum vel fere totum obtegentia. Coxæ posticæ approximatæ. Tarsi typicis minus elongati, art. 3° præcedentibus haud multo longiore.

Cum T. cursitante victitat; frequenter legi.

A very pretty and very distinguished species. Its most striking peculiarity consists in the posterior coxæ, which are as little distant from each other as those of the anterior legs, and almost touch each other, and also in the shortness of the tarsi. The

head with the antennæ, the mesosternum, the tibiæ, which are incrassated in the middle, and the posterior coxæ with regard to their enlargement, are quite typical. However, the thorax and elytra differ again from those of T. cursitans (which, in every respect, may be looked upon as the typical representative of the family in Ceylon, and which is here referred to as such), the former by the shortness of the posterior angles, which can hardly be said to envelope the shoulders; the elytra, by being less or not at all narrowed behind, giving an oblong rather than an oval shape to the insect. Although in length only about one-half shorter, it is in bulk certainly one-fourth smaller than T. cursitans; and, although probably the smallest Ceylon beetle, it is distinguished at first sight.

# 19. Ptilium subquadratum, N.

P. subquadratum, subconvexum, pilosum, obscure æneo-testaceum, thorace dilutiore. Long. corp.  $\frac{1}{4}$  lin.

Caput mediocre. Antennarum clava art. 1° inverte conico, 2° subcylindrico, ultimo elongato-ovato. Thorax convexus, angulis basalibus humeros fortissime amplectentibus, apicem versus valde rotundatus, apice leviter sinuatus. Elytra quadrata, abdomen non totum obtegentia. Scutellum parvum. Pedes robusti tibiis apicem versus incrassatis, tarsis art. 3° primi secundique longitudine, his subbilobatis subtus penicillatis, coxis posticis simplicibus distantibus. Mesosternum non carinatum.

Ubi præcedentes sed infrequenter occurrit.

The genus Ptilium is the repository for all the anomalies of the family; its characteristics, therefore, are very vague; but if the absence of the mesosternal carina and the simplicity of the posterior coxæ are the determining features amongst them, the present species, in spite of a variety of anomalies it exhibits in other respects, belongs to it. The head is of middling size; the antennæ robust, with the first joint of the club of the shape of an inverted cone, the second rather cylindrical, narrowed at the base, and the last elongate, ovate. The thorax is of very different structure from that of the foregoing species of the family, the basal angles being produced unusually far beyond the shoulders; towards the head it is strongly and rapidly rounded off, being thus altogether of a semicircular shape; at the apex it is merely slightly sinuated, and the head is inserted rather below than in this sinuosity; the whole thorax, moreover, is very convex, whilst the elytra are depressed. The wings vary from the typical form by being fringed with short, simple cilia instead of the long, feathery appendages; they are, moreover, without a distinct peduncle, but still folded in the manner characteristic of the family. The legs are stout, with the tibiæ thickest at the tip; the third tarsal joint is of the length of the preceding two, the latter are somewhat bilobed and hairy below. The posterior coxæ are simple and distant. The mesosternum without a carina. The whole shape of the insect is quadratic rather than otherwise.

# 20. Ptenidium macrocephalum, N.

P. ellipticum, subconvexum, nitidum, sparsim pilosum, supra piceoæneum, subtus piceum, pedibus oreque testaceis. Long. corp. ¼ lin.

Caput maximum. Antennarum clava elongata articulis ellipticis. Thorax subquadratus antice posticeque angustatus, basi punctis 4 magnis profunde impressus. Elytra ovata, medium versus leviter inflata, apice obtuse acuminata, abdomine longiora et ampliora, punctulis lineis dispositis obsoletissime impressa. Alæ corpore plus duplo longiores. Tibiæ fortiores spinulosæ. Tarsi breviores. Prosternum carinatum.

In præcedentium societate frequenter lectum.

This is perhaps the prettiest of the five species of the family just described, and at first sight recognized by the shape of its body and the polished back. The head is very large. The thorax is narrowed in front and behind, at the latter place impressed with four deep punctures, which cannot be overlooked. The wing-covers are oval, a little inflated about the middle, rounded at the apex, and longer and wider than the abdomen. The prosternum is carinated.

It affords me much gratification to be enabled to publish representatives of three genera of this highly interesting and probably very extensive and widely distributed family of pigmies, the Asiatic representatives of which have hitherto been entirely unknown. I have no doubt that even this island is the abode of a great many more species.

#### 21. Stenus barbatus, N.

S. elongatus, æneo-niger, nitidus, punctatus, sparsim pubescens, pedibus palpisque albidis, ore coxisque testaceis, antennis brunnescentibus. Long. corp.  $2\frac{1}{2}$  lin.

Caput thorace tertia parte latius, fronte costis 3 abbreviatis, antice albido-pubescens. Antennæ art. 3° sequentium 2 fere longitudine, 3 ultimis elongatis, ellipticis. Palpi max. elongati apice densius pubescentes. Thorax cylindricus medio leviter incrassatus, basi subquadratus. Elytra thorace paulo longiora, sed fere duplo latiora, convexa, ovata. Abdomen immarginatum. Pedes elongati tenues, tibiis apice tarsisque fortiter setosis, his art. 4° profunde bilobato.

In lacus Colomb. ripis specimina nonnulla legi.

This, as well as the following species, belongs to Erichson's

division II. B. of the genus, both having the abdomen immarginate and the fourth tarsal joint bilobed. Everything about this species is clongated. The head is about one-third broader than the thorax; the forehead is slightly excavated, with two elevated ridges running from the root of the antennæ a short distance upwards; a third runs from the crown of the head down towards the centre of the two former, but all three reach only about the middle of the head. The part below the antennæ is covered with white hair. The antennæ have the third joint much elongated, and the terminal club composed of elliptic joints. The thorax is rather slender, incrassated at the middle, gradually narrowed in front, but nearly quadratic behind. The elytra are longer than the thorax, about double its breadth, and oval, being slightly narrowed at the shoulders and the apex. The legs are long and slender, hairy at the apex of the tibiæ and the tarsi, the latter very much so on the inner side. The insect is of a metallic black colour, highly polished; the legs, palpi, and the first two antennal joints are whitish, the tibiæ and the apex of the palpi being, however, rather darker; joints 3-11 of the antennæ are brownish; the coxæ and the mouth are vellowish; the tarsi have a brown spot at the apex of the first three joints; the claws are black. The insect is punctured all over, but less so on the abdomen, the apical segments of which are indeed nearly smooth, than elsewhere, and sparingly covered with small white hairs.

#### 22. Stenus lacertoides, N.

S. robustus, nigro-æneus, dense profundeque punctatus, subtus sparsissime pubescens, pedibus palpisque testaceis, femoribus apice nigrescentibus, antennis oreque castaneis. Long. corp. 1½ lin.

Caput thorace quarta parte latius, fronte 2-costata. Antennæ robustæ art. 3° quarto paulo longiore, 9-10 globosis, 11° conico. Thorax cylindricus, medio fortius incrassatus, latitudine quarta parte longior, margine anteriore elevato, basi subquadratus. Elytra thorace longiora, convexa, humeris prominentibus. Abdomen immarginatum. Tarsi art. 4° profunde bilobato.

In prov. occid. stagnorum ripis rarius occurrit.

About this species everything is robust. It is well distinguished by the rounded club-joints of the antennæ, the elevated anterior margin of the thorax, the prominent shoulders, and its general shortness and plumpness. The forehead is rather more depressed or excavated than in the former, the two antennal ridges are shorter, the vertical one is altogether obsolete. The palpi are robust. The third antennal joint is about one-third longer than the fourth. The thorax is shorter and plumper than in the former. The elytra are less oval, having the shoulders

more prominent, and only the apex rounded-off or narrowed. The legs are similar to those of the former, but more robust, less hairy, and have the tarsi more cylindric. The insect is of a blackish metallic colour; the legs and palpi are yellowish; the fibiæ, however, the apex of the palpi, and also joints 1-2 of the antennæ are rather darker; the femora are blackish towards the end; the mouth and joints 3-11 of the antennæ are chestnut, and the coxæ pitch-colour. The animal is densely and deeply punctured all over, very sparingly covered with small greyish hairs, nearly obsolete on the back, but more distinct below. It is less highly polished than the former. I have known this species for a long time, and specimens of it must exist at the Mus. Berol.; the former I met with but lately.

I may mention, that in dissecting these two species I have observed the same remarkable production of the esophagus with the ligula, characteristic of the genus, and noticed in many

of the European kinds.

# 23. Anthicus formicarius, N.

A. castaneus, capite, abdomine elytrisque piceis, his pilorum niveorum fascia media transversali interrupta maculisque concoloribus 6 humeralibus, obsoletis, parce pilosus. Long. corp. 1<sup>2</sup>/<sub>3</sub> lin.

Caput globosum supra subtusque profunde punctatum, oculis parvis. Thorax nodoso-pyriformis, infra medium constrictus, parte anteriore crassiore lin. long. med. profunde divisa subcordiformi. Elytra elliptica.

Sub veget. putrescent. victitat; prope Colombo rarius legi.

This insect looks uncommonly like an ant. It is easily distinguished from all other species of the island partly by this resemblance, partly by the sculpture of the thorax and the white fascia across the elytra. The antennæ are robust, thickened towards the tip, the three last joints forming a club. The legs have the femora very much incrassated, the tibiæ at the apex bicalcarate and the tarsi, especially of the anterior pair, very hairy below; the fourth joint appears to be slightly cordiform. The white marks of the shoulders and the fascia across the wing-covers are composed of white hairs; the former are rather an interrupted row of these than true maculæ; the fascia consists of two halves, one in either elytron, reaching neither the external margin nor the suture. The insect is of slow motion.

#### 24. Anthicus insulanus.

A. testaceus, abdomine obscuriore, capite thoraceque rufo-testaceis, elytris fasciis 2 nigris, parce pilosus. Long. corp. 14-14 lin.

Caput globosum, oculis mediocribus. Thorax pyriformis, cum capite supra punctatus. Elytra ovata. Tarsi art. 4º bilobato.

Prope Negombo in pratis sat copiosus.

In some of the specimens before me the anterior femora are furnished with a strong spine inside, having at the same time the tibiæ of the same pair of legs slightly emarginated inside near the apex. I have reason to believe these individuals, if the distinction be a sexual one, to be females, not males.

# 25. Meligethes orientalis, N.

M. ovatus, subconvexus, pilosus, supra nigro-æneus, subtus piceus, pedibus, antennis palpisque maxill. dilutioribus, tarsis palpisque labial. brunneo-aureis. Long. corp.  $1-1\frac{1}{2}$  lin.

Mentum transversum planum, punctatum, lobis apice depressis, excavatis, glabris, obtusis. Palpi lab. art. ultimo inflato, ovato; maxill. art. ultimo apice angustato levissime truncato. Mandibulæ unidentatæ. Thorax amplus angulis acutis, antice emarginatus, postice pluries sinuatus, subtus punctatus. Elytra ovato-quadrata, angulis 4 apicalibus rotundatis, pygidium haud obtegentia. Pedes validi, femoribus tibiisque incrassatis; anteriores tibiis apice intus unispinosis, tarsis art. 1–3 fortiter dilatatis, 1–2 subæqualibus transversis, profunde reniformibus, 3° minore, cordato, 4° minimo, subcylindrico; intermed. et post. tibiis extus spinulosis, tarsis anterioribus similibus sed art. 1–3 minus dilatatis, cordiformibus. Prosternum marginatum, punctatum, obtuse acuminatum. Mesosternum antice carinatum.

Variat magnitudine et colore æneo-brunneo.

Prope Colombo in floribus per occasionem frequentissime legi.

Of the usual shape and colour, but larger than usual, varying. however, in this respect, some individuals being fully one-third smaller than others. These small individuals, which occur in the proportion of about 1 to 20, are, moreover, nearly always of a brownish metal colour, instead of a blackish green. I have been unable to discover any other distinctions. I was much interested by the discovery of these insects, having missed them for years amongst the abundantly represented Nitidulidæ of the island. They appear to be of local occurrence, or attached to certain plants, which is nearly the same. I find them in abundance in the beautiful bell-shaped blossoms of the Argyreia argentea and one or two other plants in my garden. The species appears to differ from the typical Meligethes in the following points:—the structure of the mentum, which I have sufficiently described above; the last joint of the labial palpi, which in this case is not truncated; and the first of the antennæ, which is externally incrassated, as in Epuraa. The antennæ are otherwise robust, the club is firm

and hairy. The thorax is very ample, thinly ciliated along the upper part of the anterior margin, rather strongly below. The prosternum is largely developed, marginated, punctured, and obtusely acuminated, overlapping the anterior part of the mesosternum, which (the anterior part) is cylindric and carinated. Joints 1–3 of the tarsi are strongly penicillated below, the penicilla being composed of glanduliferous hairs of a fine golden colour.

# 26. Georyssus gemma, N.

G. pygmæi statura et magnitudine, supra purpureo-æneus, iridescens, subtus piceus; alatus. Thorax subsemiorbicularis infra apicem constrictus, sulco med. long. divisus, lateribus, basi apiceque excavatus, impressionibus 3 majoribus dorsalibus, 2 minoribus lateralibus. Elytra fortissime costata, costis obtuse dentatis, in interstitiis transversim punctato-impressa, ad humeros profunde excavata, infra medium leviter sinuata. Tibiæ extus spinulosæ, intus sparsim ciliatæ.

In prov. central. montibus Kotmaliensibus alt. 3500 ped. in rivulorum ripis non infrequenter legi.

Lacordaire and others characterize Georyssus as having the elytra soldered together, and being destitute of wings. In the present species, however, the elytra are unconnected, and wingcovers proportionately larger than in any other beetle I can at present think of. They are elongated and comparatively narrow, resembling in shape very much those of a Libellula, have a few veins at the base, and are ciliated at the margin. I have, moreover, occasionally taken insects of this genus flying about the light at night, but I am not quite sure at present whether it was this or any other species. The sculpture of the thorax is complicated and difficult to describe; however, the leading features in it are these:—a subapical sinuosity on either side; a longitudinal furrow; excavated sides, base and apex; three larger dorsal depressions (one central, two obliquely basal), and two smaller lateral ones at the subapical sinuosities, a short elevated ridge at the centre of the base separating the two basal impressions, and being itself divided by the longitudinal furrow; two elevations separating the anterior part of the basal impressions from that of the central one (at the middle these three depressions are connected); two small rugosities near the anterior margin, one on either side of the longitudinal furrow.

The sculpture of the elytra is less complicated: they have a deep cavity at the shoulder, a large but not deep sinuosity below the middle, and are obtusely acuminated. The costæ of the back are eleven in number, the suture lying in the central one.

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The half of this central costa and the exterior margin form an elevated border round either elytron. The first and second on either side run towards the apex, but come to a stop (very abrupt in most, but less so in some, specimens) before reaching it; the third, after having been interrupted near its base by the subhumeral cavity, runs on, but does not reach as far as the former; the fourth does not leave the region of the shoulder: the last on either side is very prominent at the base, but soon forms an abrupt declivity, and runs on as a low ridge to below the middle. The back of all these costæ is obtusely dentated. The interstices are marked with large, shallow, transverse impressions. The head of the insect is rather large and even. The mandibles are furnished with an obtuse subapical tooth, the two lower thirds are ciliated. The maxillæ have the apex of the outer lobe externally enlarged, rounded-off, and furnished with three strong teeth replaced by cilia on the inside; the inner lobe is conic, and similarly provided with teeth and cilia, but much thinner and finer. The maxillary palpi are robust, the last joint is inflated at the base. The antennal club is hairy, dark (whilst the remaining joints are yellowish), conic, and somewhat securiform, the sixth joint being inserted on one side of the seventh. legs are robust, the tibiæ slightly curved, obliquely truncated at the end, furnished with spines along the outside, and with distant cilia along the inner.

# 27. Hydrochus lacustris, N.

H. elongatus, subdepressus, supra metallicus, iridescens, subtus piceus, pedibus, antennis, palpis elytrorumque margine magis minusve brunneis, mento cyaneo. Long. corp. m. l lin., f. multo major atque robustior.

Palpi maxill. robusti art. ultimo elliptico leviter inflato. Mandibulæ apice bifidæ. Antennarum clava dense pilosa. Thorax oblonge quadratus, basin versus angustatus, basi medio productus, cum capite profunde punctatus. Elytra ad humeros oblique truncata, apicem versus sat fortiter angustata, profunde striato-punctata. Tibiæ extus spinulosæ.

Specimina nonnulla in lacu Colomb. legi.

The head is robust, broader than the thorax; the eyes large

and prominent.

The femora, the last joint of the maxillary palpi, the mandibles and the tarsal joints are dark towards the apex. The last abdominal segment of the female is furnished with a bifid hairy appendage.

#### 28. Hydrous rufiventris, N.

H. ovatus, convexus, supra oleagino-niger, subtus obscure ferrugineus, pedibus dilute piceis, labro æneo, reliquis oris partibus cum clypeo testaceis. Long. corp. 8 lin.

Palpi maxill. articulis apicem versus abruptius incrassatis, art. 3º quarto sesqui longiore. Antennæ art. 7-8 fortiter perfoliatis, ultimo acuminato. Caput antice utrinque punctulorum serie subsemicirculari et ad oculorum marginem interiorem impressum. Thorax punctulorum seriebus 4 lateralibus, 2 subapicalibus obliquis abbreviatis signatus. Elytra subtiliter striato-punctata. Tarsi omnes unguibus basi fortiter unidentatis. Carina prosternalis cultriformis.

Specimen singulum f. nocte ad lumen cepi.

As far as my resources allow me to ascertain, a very anomalous species, having the perfoliated antennæ and toothed claws of a *Hydrophilus* and the cultriform prosternal carina and the elytra of a *Hydrous*. I have placed it in the latter genus on account of the sharp edge of the prosternal carina, in which the great distinguishing character of this genus seems to lie, this part

being deeply grooved in Hydrophilus.

The insect at once attracts attention by the reddish colour of its abdomen. It is of a blackish olive-colour on the back, having, however, the clypeus and the anterior margin of the labrum of a yellowish brown, the latter being otherwise of a rather metallic colour. The remaining parts of the mouth are more or less yellowish. Joints 1–6 of the antennæ are yellowish too, with the exception of the second, which is dark; joints 7–9 are blackish and pubescent. The legs are of a light pitch-colour. The lower part of the head is impressed with two rather semicircular series of punctures, similar punctures occurring along the internal margin of the eyes. The thorax is marked with six series of them, and on the elytra they are arranged in lines. The sternal carina is well developed, the prosternal part has a sharp edge, whilst the mesosternal one is obtuse on the back, and the metasternal part depressed and slightly grooved.

# 29. Hydrous inconspicuus, N.

H. præcedente minus convexus, supra oleagino-niger, subtus rufopiceus, ore testaceo. Long. corp.  $4\frac{1}{2}$  lin.

Palpi maxill. art. 2° et 4° subcylindricis, 3° apicem versus sensim incrassato, sequente tertia parte longiore. Antennæ art. 7–8 subglobosis, 9° magno, ovato. Caput, thorax et elytra ut in præcedente sculpta et signata.

In lacu Colomb. mens. Jun. non infrequenter cepi.

This is in every respect a normal species. The prosternal 25\*

carina has a sharp edge; the claws are simple, the antennal club is composed of rounded joints, the elytra are of the typical structure, &c. In the latter respect, as well as with regard to the various series of punctures upon head, thorax, and elytra, it resembles the former; the punctures of the elytra are, however, less distinct. Joints 1–6 of the antennæ are yellowish, the club being dark and finely pubescent. The maxillary palpi have joints 2 and 4 subcylindric, but the intervening one thickened towards the tip.

I have frequently, in the month of June, taken the pupæ of this species on the banks of the Colombo Lake, and hatched them at home. I found them about 1 inch under ground, and often as far as 12 feet from the edge of the water, but still in muddy places. The imago is very active, perhaps more so than

any other species of the genus.

[To be continued.]

#### XXX.—Note on a Nematoid Worm, parasitic upon Termites. By C. Lespés\*.

In the course of my observations on the Termites, I have twice seen numerous nests, which appeared to be in a state of great prosperity, entirely destroyed in a few days. These two societies were established with me in large glass-vessels, but the earth of the nests was too moist; in this earth I then saw an immense number of little white worms swarming, and by examining them carefully and dissecting the Termites of these societies, I have been enabled to ascertain the history of the parasite. In its characters this Nematoid worm closely approaches Leptodera of Dujardin, but it must form a distinct generic group, as several of its characters differ from those of Leptodera: -its mouth is armed with three tubercles, its neck is short and thick, and lastly it is oviparous, whilst Leptodera is viviparous. The characters of the generative armature of the male are identical, but the aliform expansions so remarkable in M. Dujardin's worm are wanting in mine.

#### Genus Isakis.

Corpus fusiforme, extremitate caudali longe subulata haud alata. Caput corpore continuum, truncatum. Os trilabiatum. Penis vagina spiculisque duobus æqualibus instructus. Fæminæ apertura genitalis in corporis medio. Ovipara.

<sup>\*</sup> Translated from the Annales des Sciences Naturelles, tome v. Zoologie, p. 335.